urban standard specifications for public improvement manual NO. 10 NO. 6 'CROSS BAR' GENERAL NOTES 'END BAR' (2 REQUIRED) IT IS INTENDED THAT THE DESIGN FOR THE "PIPE APRON GUARD" DETAILED NO. 6 'TOP BARS' HEREON PROVIDE A TREATMENT FOR THE EXPOSED END OF A PIPE CULVERT, SUCH THAT AN OUT-OF-CONTROL VEHICLE COULD PASS OVER THE END OF THE CULVERT WITHOUT UNDUE LOSS OF CONTROL OR DAMAGE TO THE VEHICLE. STEEL BARS USED IN CONSTRUCTION OF THE GUARD MAY BE SMOOTH OR DEFORMED STEEL. APRON WELDING OF STEEL PARTS SHALL BE AS SHOWN AND SUBJECT TO THE APPROVAL OF THE ENGINEER. THE GUARD SHALL BE GIVEN TWO COATS OF PAINT, THE 0 FIRST COAT BEING AN APPROVED PRIMER AND THE SECOND FOLIAGE GREEN. HE IN LIEU OF PAINTING AS SPECIFIED, THE COMPLETED APRON GUARD MAY BE HOT-DIPPED GALVANIZED. ALTERNATE DETAILS FOR DESIGN OF APRON GUARD MAY BE SUBMITTED TO THE JURISDICTIONAL ENGINEER FOR APPROVAL. WELD EACH OF SPECIAL NOTE "TOP BARS" TO WHEN DETAIL PROJECT PLANS REQUIRE PIPE APRON GUARDS OF SIZES OTHER THAN THOSE SHOWN HEREON, THE DESIGN FOR SUCH APRON GUARDS SHALL BE TOP PLATE. 4"X 4"X 1/4" SIMILAR TO THOSE INDICATED, CONFORMING TO MINIMUM BAR SPACING AND PLATE WASHER GERERAL REQUIREMENTS SHOWN. TYPICAL PLAN WELD AT EACH "TOP BAR" AND "CROSS BAR" INTERSECTIONS 1/4" COTTER PIN 3/8" STEEL TOP PLATE SHALL CON-NO.6 CROSS BARS FORM TO SURFACE SHAPE TOP BARS SHALL BE SHAPED TO I-I/2" OF APRON INSIDE DIA. TO ALLOW FOR PLACEMENT & REMOVAL OF END BAR. TABLE A NO.6" TOP BARS" EVENLY SPACED NO.6 TOP BARS 1/4 (SEE TABLE A) COTTER 15" PIPE APRON 5 EA. 1-1/2" HOLE PIN 18" PIPE APRON 6 EA. FOR PIN. 4"X4"X I/4" PLATE 3" CLEAR 24" PIPE APRON 8 EA. WASHER & COTTER PIN 30" PIPE APRON IO EA. 4"X 4"X 1/4" 36" PIPE APRON I2 EA. NO. 10 'END BAR" PLATE WASHER PIPE APRON 4"X 4"X I/4" PLATE WASHER & COTTER PIN I-I/2" HOLE FOR END BAR 2" CLEAR INSTALLATION VIEW 1-3/8" DIA, HOLF THROUGH 5/16" PLATE FOR I-I/4" PIN. ***** WELD AT EACH TOP BAR AND CROSS BAR SPACE BARS EVENLY INTERSECTION. SECTION (SEE TABLE A) PLAN END VIEW REV. DATE RY FLARED END SECTION APRON GUARD FIGURE: 4020.3 DATE: 01-01-98 SHEET I OF I